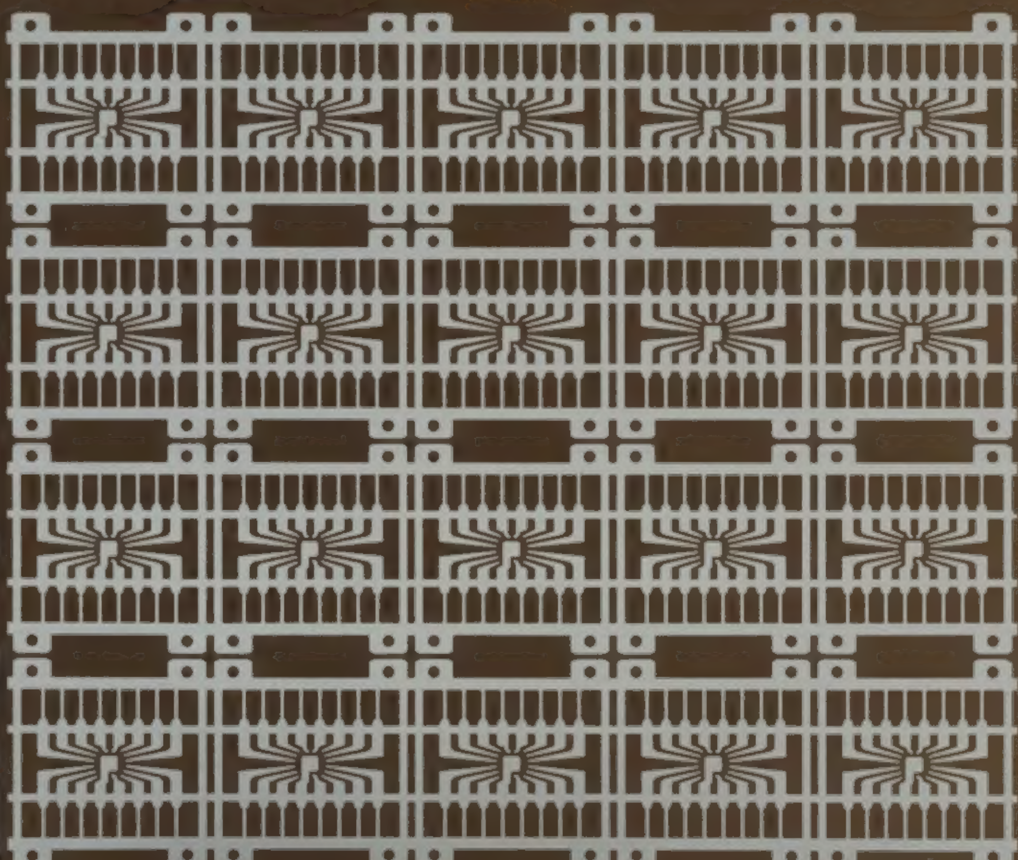
TELEDYNE REPORT
For the Year 1970



Thin Metals: Ancient Art, Today's Science

TELEDYNE REPORT FOR THE YEAR 1970

This Teledyne Report features the story of precision thin metals produced by Teledyne Rodney Metals. Precision thin metals are among today's fastest growing areas of technology. They have helped make possible such advanced concepts as high performance honeycomb core panels, hybrid metal and plastic foam core structures, chemical machining of precision parts, pre-finished metal strip, and adhesive bonded metal-surface materials.

Teledyne Rodney Metals is one of the world's largest producers of precision thin metal strip and foil, and is a supplier to virtually every category of modern industry in the United States. A sizeable percentage of the company's production is also shipped overseas to Great Britain, Europe and Japan.

Teledyne Rodney Metals specializes in the metallurgy of modern high-performance alloys, and is uniquely qualified in the techniques of precision rolling of thin metals. For further technical information on products and capabilities write to Teledyne Rodney Metals, P.O. Box 915, New Bedford, Massachusetts 02742.

Teledyne Report, featuring subjects of particular interest from the many areas of Teledyne activity, is issued on a quarterly basis. Previous topics include:

The Reproduction of Music: Men began experimenting with methods of recording sound over 150 years ago, but it remained for electronics and some very recent developments to allow music to be reproduced with concert-hall realism.

The Crowded Spectrum: The lower portion of the radio spectrum is already overcrowded with hundreds of wireless services. Microwave devices such as the traveling wave tube are opening higher frequencies for practical use.

Science and Cinematography: Modern techniques of slow motion cinematography let scientists and engineers analyze actions and events that happen too fast for the eye to follow.

Superalloys: Materials that retain high strength at temperatures approaching 2000°F make the jet age possible.

Jets of Water for Dental Health: Studies show that high-pressure pulsed jets of water are a valuable aid in the care of teeth and gums.

The Last Eight Miles: The controlled descent to the surface of the moon was accomplished through use of a century-old principle called the Doppler effect.

Oil Beneath the Sea: New techniques of reflection seismology speed the profiling of the strata beneath the ocean floor in the search for oil.

Electronic Navigators Find the Way: High speed air and space travel as we know it today is made possible by a wide variety of sophisticated guidance systems.

From Sand to the Reactor: Sand from the beaches of Australia provides two atomic-age metals needed for the operation of practical nuclear power generators.

This report for fiscal 1970 is the tenth annual report of Teledyne, Inc. Again, as in each of the past years, your company is reporting record new highs in net income and earnings per share. The new high in earnings was $64.1 million compared to $60.1 million last year. On a fully diluted basis, net income amounted to $1.97 per share of common stock and common stock equivalents, which is equal to $1.91 per share after adjustment for the three percent common stock dividend to be paid on February 19, 1971. This compares to $1.89 per share on the same basis last year.

The increase in net income in 1970 was accomplished in spite of a decline in total sales from $1.29 billion to $1.22 billion. One of the factors contributing to the improvement in after-tax results was the lower Federal income tax rate in effect in 1970. A more important contributing factor was the improvement in the results of Teledyne United Corporation, our insurance and finance subsidiary. Teledyne United's net income rose from $10.5 million in 1969 to $15.1 million in 1970. A portion of Teledyne United's increase is accounted for by the results of Argonaut Insurance Company, which were included for all of 1970 compared to six months in 1969.

It will be noted that the interest expense of Teledyne, Inc. declined substantially in 1970. This decline reflects the program of debt reduction which has been carried out during the past two years. The combined short-term debt of Teledyne, Inc. and Teledyne United, which stood at approximately $180 million in January 1969, and at $116 million in October 1969, was completely eliminated by the end of fiscal 1970. The debt reduction in 1970 was accomplished

from Teledyne's internal cash flow, without any conversion of short-term to long-term debt. The debt repayment was also made without payment of dividends by the insurance and finance subsidiaries. On the contrary, Teledyne increased its investment in Teledyne United from $124.3 million to $208.5 million, primarily by advancing funds for the repayment of Teledyne United's bank debt.

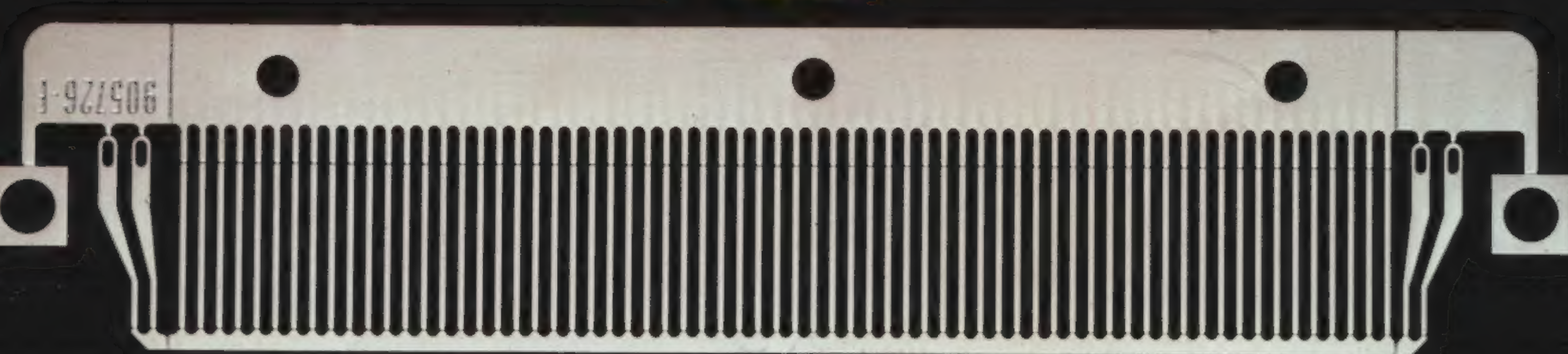
The combined annual interest expense of Teledyne, Inc. and Teledyne United was $25.2 million in 1969 and $23.0 million in 1970. Interest expense of Teledyne United in 1970, which totaled $14.0 million, included $5.3 million payable to Teledyne, Inc., reducing Teledyne's net interest expense for the year to $9.0 million. The current rate of interest expense for Teledyne and Teledyne United combined is below $20 million annually.

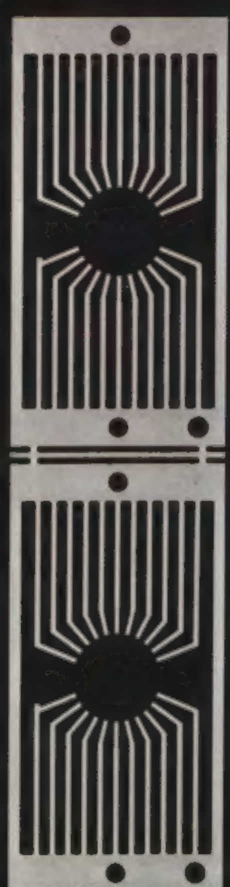
The strong financial condition of Teledyne is evident in our balance sheet. We have an excellent cash position, a ratio of current assets to current liabilities of nearly three to one, and a low funded indebtedness of about 25 percent of total capital.

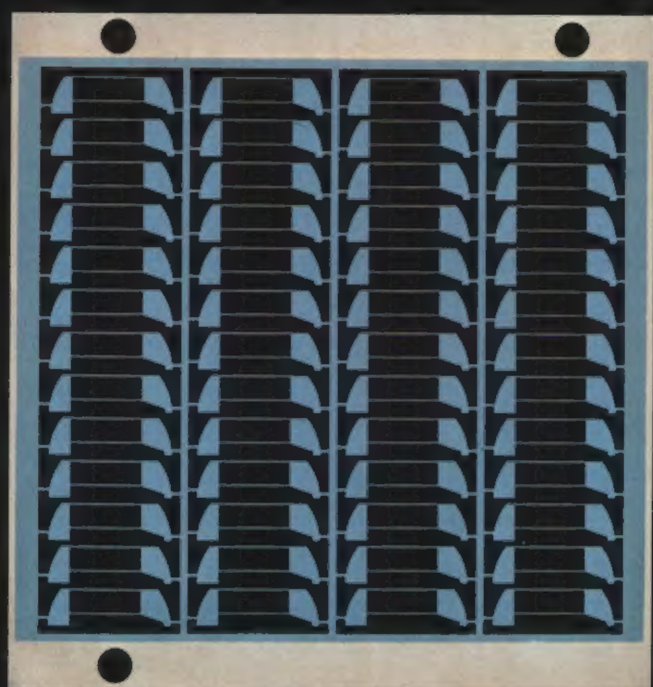
We call your attention to a change in format of these Teledyne Reports which began in fact with the annual report for 1969. Each of the three quarterly reports for fiscal year 1970 and the present annual report contain a feature article of general and technological interest. In addition, there is a review section in each report which describes new product developments and other accomplishments of the company. A listing of subjects covered in previous reports appears on the first page of the report you are reading. A review of these reports will provide a broad perspective of Teledyne's scientific and technological interests and capabilities.

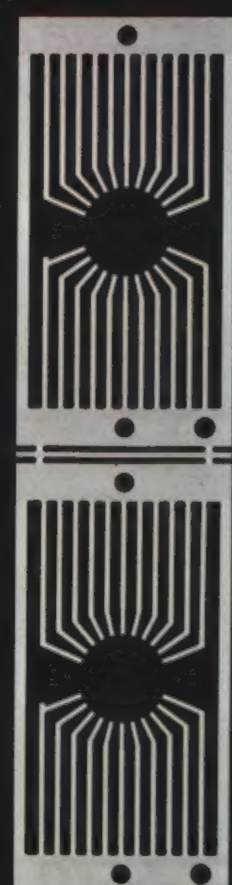
George A Roberts — President

Henry E. Singleton — Chairman of the Board of Directors









COVER AND ABOVE:
Two artful uses of thin metals through the ages are contrasted in the pre-Columbian breastplate of beaten gold from the Nazca region of Peru ca. A.D. 100, and the precise configurations of computer parts chemically etched from modern thin metals, 1970.

Gold artifact photo: Peter T. Furst, courtesy Museum of the American Indian, Heye Foundation. Etched parts: Cover, Buckbee Mears, Co.; Above, Vacco Industries.

THIN METALS

Less becomes more when space-age metals are rolled out into thin strip and foil. These new materials, already being used in thousands of products, are making new metal-working techniques possible.

A strip of paper that could easily be crushed between two fingers supports hundreds of times its own weight when folded into an angular geometric shape. The same principle is used to make rigid, lightweight honeycomb panels from precision thin metals.

Sometime before written history began, men had found ways to form ductile metals such as gold into thin uniform sheets. Gold artifacts found in the Near East show that the technique was already advanced nearly 5000 years ago, and by the time of the Roman Empire gold leaf was being widely used for architectural ornamentation. In the first century A.D. Pliny the Elder described how gold leaf was made by beating sheets of gold between "skins" of animal membrane. By this seemingly crude method it is possible to reduce gold to translucent sheets 4 or 5 millionths of an inch thick, and the technique has survived until today, essentially unchanged.

In the last two decades, however, thin metals have taken on a new importance. They have become materials of modern precision technology. Not only are common metals such as aluminum and copper used extensively in thin sheets and foil, but hundreds of specialized alloys are routinely rolled down to a tenth the thickness of this page or less.

Teledyne Rodney Metals produces these precision thin metals and foils in wide continuous strip for many uses. They are precision metals in two senses. First, modern rolling equipment and beta ray gauging devices permit the thickness of the metal to be controlled to within plus or minus 6 millionths of an inch. A 6000 pound coil of .001″ stainless steel contains 3.5 acres of metal.

Second, these metals are precise in the sense that the metallurgy of the product is closely controlled and uniform throughout each coil to exact metallurgical and physical specifications of the customer. Because they are so precise, Teledyne Rodney thin metals have become a new kind of technological material for modern products ranging from nuclear reactors to electric shavers.

Thinness for Lightness

A strip of writing paper can't support much more than its own weight in flat form. But shaped into a series of zig-zag folds it can support hundreds of times its own weight. This principle is used to produce honeycomb panels that offer exceptional strength and rigidity with light weight. Thin strips of metal are bonded together by welding, brazing

or adhesive methods to form an expanded honeycomb core. This core can be shaped into the cross section of an airfoil by special machining methods or used to make flat panels. Two skins of thin metal are then bonded to the surface of the core to provide a lightweight structure with remarkable resistance to bending and torsion.

Thin metals have also been combined with other materials to achieve special properties of light weight and strength. The floor panels for the Boeing 747, for example, had to be rigid and lightweight, as well as hard enough to withstand the high, localized pressures of women's spike heels and the impacts of dropped luggage. Of many materials tested, the best consisted of two thin sheets of titanium metal bonded to a core of closed-cell polyvinyl chloride rigid plastic foam. Teledyne Rodney Metals supplies the titanium sheet for this application.

Even where such specialized hybrid materials are not needed, large amounts of thin metal are used in airframe construction. The outer skins of conventional metal aircraft are usually aluminum alloys, while stainless steels and titanium are used for high performance aircraft.

Making the Most of Expensive Materials

When the ancients hammered out gold into thin sheets they were making economical use of an expensive and rare material for its decorative and corrosion-resistant surface properties. Thin metals are often used today for much the same reason. Wherever the surface quality of a metal is its most important attribute, thick metals waste material.

Stainless steel or other alloys can be bonded to panels of plywood or rigid plastic foam to form an ideal architectural material for indoor or outdoor use. Such hybrid materials give the surface advantages of metal without the high cost of using metal that is thick enough to be structurally rigid. For the same reason, much of the decorative trim used on automobiles, appliances and other consumer products is made of thin metal bonded to other materials.

Another surface quality of metal is its ability to reflect heat energy when polished. Consequently many thin metals and foils are used for insulation purposes. Conversely, thin metals are also useful where thin fins are required to radiate heat as in automobile radiators, air conditioners, cooling towers and all types of heat exchanger applications ranging from cryogenic coolers to nu-

Effective gas seal between the rotating and stationary parts of high performance jet engines is provided by curved segments of honeycomb structure made of high temperature thin metal alloy.

TOP: Adhesive bonded aluminum honeycomb core shows the classic hexagonal shape of the cells. A thin skin of metal bonded to the upper and lower surfaces completes the panel.

Two sheets of Teledyne Rodney's commercially pure titanium bonded to a core of closed cell polyvinyl chloride rigid plastic foam make a strong hard-surfaced lightweight panel used as flooring in the Boeing 747.

TOP: Welded stainless-steel honeycomb structure with perforated face is a high strength lightweight structural material that reduces noise radiated by jet engine turbines and compressors.

A special tape controlled machine tool designed and constructed by Teledyne Ryan Aeronautical automatically shapes an entire panel of aluminum honeycomb core to the exact contour of a wing airfoil. Tolerance is held to within 1/1000th of an inch.

clear power plants. An expanding application of this type will be the extensive use of stainless steel foil in the regenerating units of automotive gas turbines which will soon be powering trucks and busses.

From Pollution Control to Photography

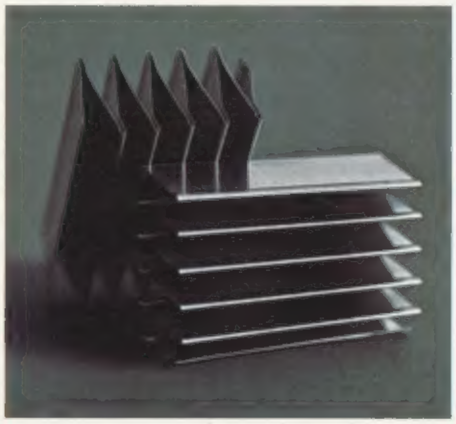
Some metals are useful in thin form because of their reactive chemical properties. Metals that are catalysts, for example, help certain chemical reactions take place without entering into the reaction or being changed themselves. Since this effect depends on the surface area of the metal exposed, the chemical industry uses many thin forms of metal. Catalytic afterburners to reduce the amount of unburned hydrocarbons in the exhaust gases of automobiles work on this same principle. At present they cannot be used successfully on automobiles because the lead in present gasoline destroys the effectiveness of the catalyst in a short time. When lead is finally removed from automobile fuels there will be a large additional market for these materials in combating air pollution.

Photographic flash bulbs also make use of the chemical reactivity of metals in extremely thin form. A modern flash bulb consists of a shredded or crumpled foil of zirconium about 8/10,000 of an inch thick inside a glass bulb filled with oxygen. When the foil is ignited by electrical or mechanical means it burns rapidly, producing a short bright flash of light. Teledyne Wah Chang produces most of the zirconium foil used for this purpose. Hafnium, another of Wah Chang's exotic metals is being tested by various manufacturers for the same purpose. While it is more expensive than zirconium, it produces roughly twice the light for a given amount of material, making possible more powerful compact flashbulbs.

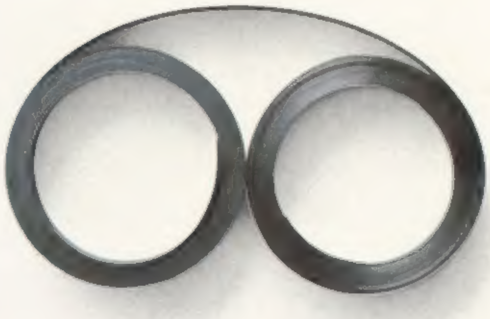
Thin Metals: The Un-Raw Raw Materials

The uses of precision thin metals have been expanding rapidly in recent years because they offer the fabricator materials that closely meet the requirements of his finished product. Springs of all types are an excellent example. Teledyne Rodney Metals produces special stainless steel spring alloys, rolled to exact thickness, in any required width, and delivers it to the fabricator in the desired state of temper. For many applications this material need only be cut to length and formed into the required shape to produce a finished part. Springs made of Teledyne Rodflex stainless

Zirconium, one of Teledyne's atomic age metals rolled to foil 8/10,000th of an inch thick, produces a brilliant flash of light when it burns in the oxygen-filled bulb of a flashcube. Hafnium, another Teledyne metal, is being introduced in new higher-output flashcubes.



Teledyne Rodney stainless steel foil is used to make these precision springs for automotive automatic transmissions.



Energy to retract automotive seat belts is stored by this negator power spring made of Rodflex stainless steel.

Watch and clock mainsprings, as well as springs and shell parts for expansion watch bands are made from Teledyne alloys.

Pull the cord on the back of this doll and she'll talk to you. The mechanism is driven by a compact spring made of special Teledyne Rodney stainless steel spring alloy designed for long fatigue life.

steels have greatly increased fatigue strength compared to carbon steel. They are used widely in such things as automatic transmissions, general industrial equipment, seat belt retractors, clocks, watches and watch bands, and even in talking dolls.

When it comes to precision parts fabrication, thin metals offer tremendous advantages. Teledyne Rodney thin metals can be production rolled to thicknesses of as little as three ten-thousandths of an inch with a tolerance control of plus-or-minus three percent.

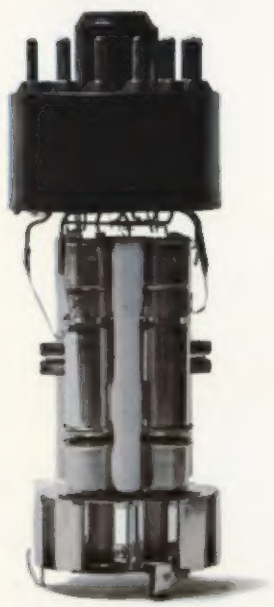
This makes these materials ideal for shims and gaskets which require precise thickness, as well as for many small parts used in instruments, telephones, computers, electron tubes and components where precise thickness and controlled metallurgy are important.

Still other thin alloys are specially designed for deep drawing operations such as the manufacture of pen and pencil barrels and caps, eyelets, aerosol can caps, 35 mm film cans and similar products.

Chemical Etching: New Fabrication Technique

The availability of a great many alloys in precisely uniform thicknesses and uniform metallurgical grain structure has made several new methods of fabrication possible and practical. One of these is the photo-chemical etching of fine, delicate or intricate parts from thin metal sheets. The pattern of the desired part is formed on the surface of the metal with a material that is resistant to the chemical etching solution. This is usually done by a photographic method that permits easy mass production. When the prepared metal is put in the etching bath the unwanted material is dissolved away leaving the desired part. Computer lead frames and electric shaver heads are two of many diverse types of parts made this way.

Color television receivers would be much more expensive—if they were practical at all—without the use of this chemical etching technique and precision thin metals. The aperture mask in a color TV picture tube is a thin sheet of metallurgically-controlled carbon steel that is perforated with over 200,000 micro-sized holes per square foot. These holes must be precisely positioned and spaced. A color television aperture mask is undoubtedly one of the most precise products made in the world today on a mass production basis.



Precise thickness and metallurgical properties of thin metals make them ideal for the fabrication of metal parts for the electron gun assembly of color TV picture tubes and other electronic components.

TOP: Flexible welded hose made from metals in the thickness range of 4 to 15 thousandths of an inch are used in a wide variety of industrial and aerospace applications.

Thin metals are widely used in manufacture of gaskets and shims for virtually every type of machinery. These gaskets are made of Teledyne Rodney stainless steel.

TOP: Teledyne Rodney stainless steel and aluminum strip are used for many types of camera parts. Accuracy and special flatness are essential properties of the materials used for these purposes.

Convoluted diaphragm bellows made from stainless steel and nickel alloys find use in instruments ranging from thermostats to industrial control equipment.

TOP: Carbon steel, vinyl coated on two sides in different colors is supplied by Teledyne Rodney for 35 mm film cassettes. Thin metals specially designed for deep drawing are widely used for parts such as 35mm film cans, aerosol can tops and pen and pencil barrels.

Pre-Finished Raw Materials

Because thin metals are manufactured, processed and usually delivered in continuous coils, they can be easily coated in their raw state with a wide variety of colorful coatings that will form the final color and finish of the fabricated object. This pre-coating eliminates the costly, space-consuming cleaning and painting of individual parts after fabrication and is one of the most rapidly growing techniques in the metalworking industry. Uncoated thin metals are also available in a choice of surface textures ranging from mirror bright to dull matte, on customer specification. These finishes can be supplied with peelable or strippable temporary coatings that protect both the metal and the forming dies during fabrication and are then easily removed.

About 200,000 precisely sized and positioned holes per square foot are required in the aperture mask of a color TV tube. It is chemically-etched from metallurgically-controlled carbon steel sheet.

TOP: Chemically-etched stainless steel wafers such as this one are used in filters capable of removing particles less than a micron in size from the water in nuclear reactors.

Thin metal strip can be precoated on both sides in any desired color or type of coating. It permits items such as this film pack to be fabricated simply without any further finishing operations.

TOP: Special high hardness stainless alloy is used for electric shaver heads to provide long wear and corrosion resistance. The close tolerance chemically-etched cutter pattern facilitates a close shave.

HOW PRECISION THIN METALS ARE MADE

The raw materials used in producing thin metals are giant coils of various metallurgically-controlled alloys melted and processed to Teledyne Rodney Metal's specifications. The requirements for these raw materials are among the most exacting in the metalworking industry, and each coil is subjected to an exhaustive series of physical and metallurgical quality assurance tests before acceptance for rolling.

When approved for processing, the coil stock is passed back and forth through cluster-type Sendzimir rolling mills which use small-diameter precision ground steel rolls under controlled pressure to reduce the metal to a thinner cross section. The starting material must pass through the mill dozens of times to achieve the specified thickness.

During the rolling process the uniformity of thickness of the metal is electronically controlled on a continuous basis by a beta ray gauging apparatus. A source of beta radiation on one side of the metal and a beta ray detector on the other side feed instantaneous thickness information to the mill control computer which automatically adjusts roll pressure to insure continuous gauge consistency at full operating speeds of 500 feet per minute.

Teledyne Rodney Metals meets tolerances on a day-to-day production basis that are one half those specified by regular steel industry standards. A continuous paper chart showing the exact thickness of each lineal foot of metal is also maintained on file for each order.

Rolling space-age alloys down to ultra-thin gauges requires extensive metallurgical control of the changes that take place in the internal structure of the material. As metal is reduced in cross section by rolling, its grain structure is compressed and re-oriented and further reduction is impossible without intermediate annealing under carefully balanced conditions of heat, time and atmosphere. Teledyne Rodney Metals utilizes eight different types of heat treating lines to accommodate the variety of alloys produced. It is not unusual for some types of metal to be cycled back and forth from rolling to heat treating twenty times before the final thickness is achieved with the correct metallurgical properties.

To produce super-flat thin metals for use in critical applications the coils of finished material are fed through a maze of small diameter rolls under extremely high lateral tension. This combination of stretching and pressure while passing over and under the rolls creates a ripple-free super-flat material.

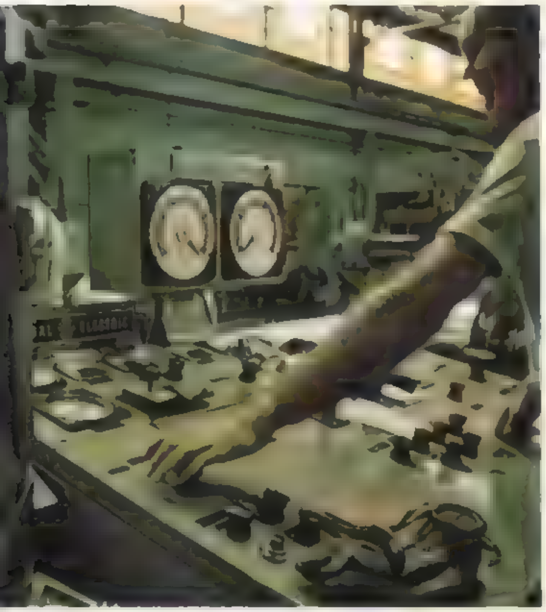
Another critical operation in the processing of foils and thin metals is the final slitting of the material to customer specified width. Slitting foil thicknesses of high alloy materials requires extremely sensitive equipment and highly-trained technicians. Finished widths as narrow as one twentieth of an inch within a tolerance of one thousandth of an inch are a commonplace production requirement. The edges of the material can be left in the raw state as they come from the slitter, but more often they are further treated with tungsten carbide edge conditioning tools that smooth the edges and contour them to the shape required in the customer's specification.

During manufacturing, all metal is subjected to a series of quality control inspections ranging from simple thickness checks to extensive chemical and metallurgical tests, including metallographic photographing of the grain structure of the material.

For special applications the metal can be coated on a continuous 500-foot high speed paint line. Both sides are coated at the same time, and the two sides may be coated with different colors simultaneously. Adhesive coatings or strippable temporary finishes may be applied by the same equipment.

The finished metal is an advanced precision material that makes possible many products that would otherwise be technologically or economically unfeasible.

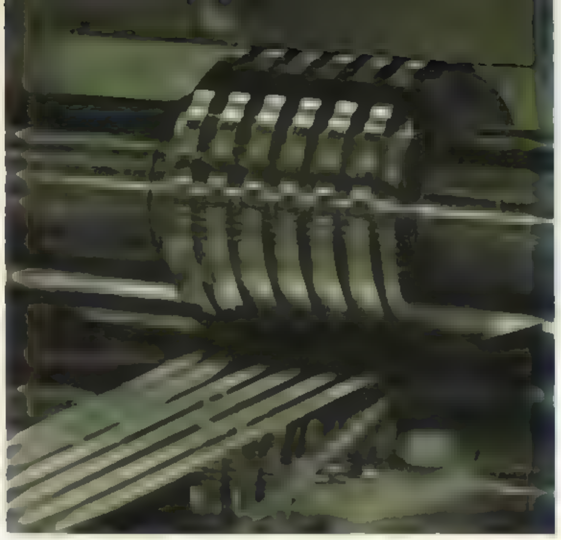
Stainless steel in the process of being rolled to a specified thickness is shown being recoiled at one end of the rolling mill. Stainless steel alloys of many types make up one of the most important classes of material rolled by Teledyne Rodney Metals.



A strip of metal entering the annealing oven reflects the red glow of radiant heating elements that heat it to 2000°F. under controlled atmosphere to recrystallize its grain structure.

CENTER: Operating the control equipment at the mill console takes years of experience and constant surveillance to insure uniform quality of the strip moving at 500 feet per minute. The twin gauges are the readout dials of the beta ray gauging equipment.

TOP: The two small rollers stacked vertically one above the other at the center are the working rolls of a modern cluster mill. They roll out the metal that passes between them. The other rollers keep them from flexing so that the metal is rolled perfectly flat.



Checking the superficial hardness of a sample of thin metal is one of dozens of physical and chemical quality assurance tests that are made on every coil of metal produced by Teledyne Rodney Metals

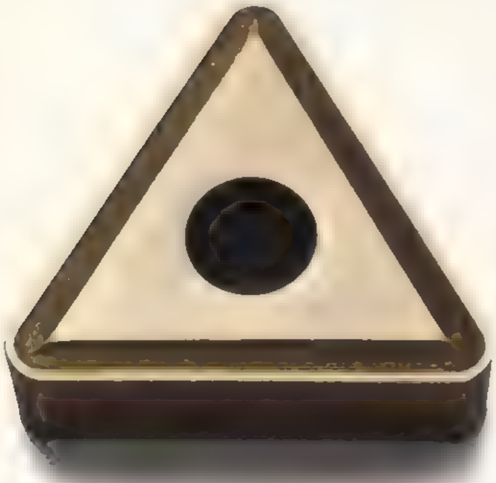
CENTER: Carbide cutters are used to shave the edges of stainless steel spring stock into smooth rounded contours. This material will be used to make expansion watch bands

TOP: Highly polished tool steel knives are used to accurately slit titanium foil into narrow strips that will be used in the fabrication of honeycomb core material.

Precoated thin steel coming out of Teledyne Rodney's 500-foot continuous paint line will eventually be fabricated into watercolor kits for children. The paint line can also be used to apply peelable or strippable coatings that protect the metal during fabrication and are subsequently removed.

REVIEW 1970

RAYDIST HELPS CLEAN OCEAN BOTTOM
Oil drilling operations off the coast of Australia have resulted in loss of anchors, cables, drums, pipe and various other materials that have littered the ocean floor and interfere with the use of nets by commercial fishermen. A Teledyne Hastings-Raydist radiolocation system is being used there in conjunction with a wide range sonar system to scan the bottom and pinpoint the location of the debris. The Raydist system, which can determine a position on the open ocean within a few feet at ranges of hundreds of miles from its base stations, enables a barge to return to the exact position of each piece of debris and remove it.



Composite cutting tool

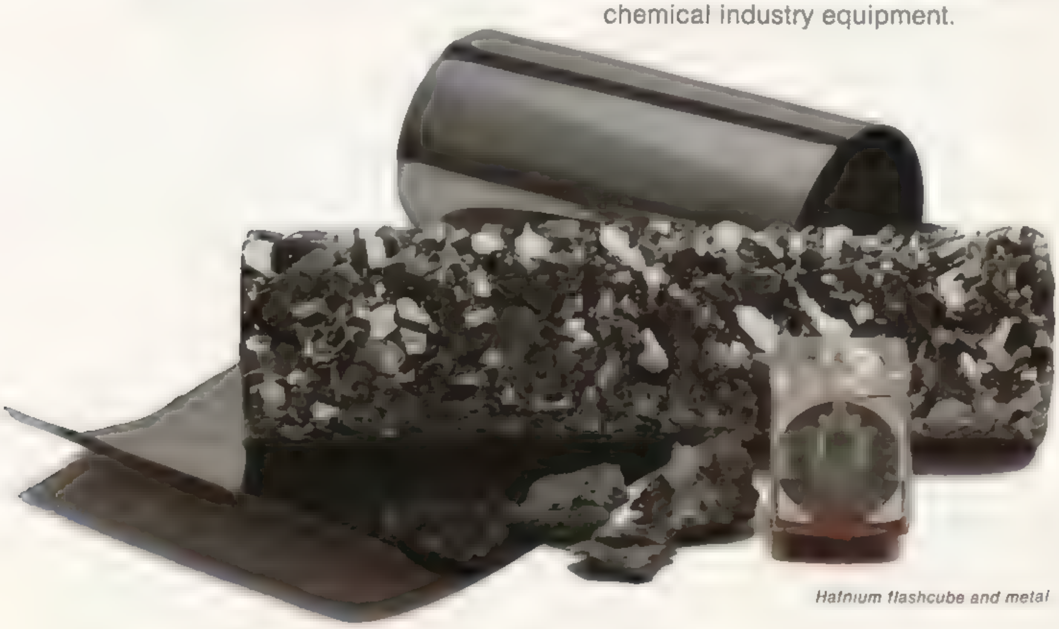
LONGER LIFE CUTTING TOOLS
Teledyne Firth Sterling has successfully developed a new composite cutting tool which combines, in a unique manner, the best features of two materials. A 0.0003" coating of titanium nitride, deposited by a high temperature chemical process, increases the life of a tungsten carbide cutting tool by a factor of three. This longer life is achieved because the titanium nitride coating reduces the frictional forces between the cutting tip and the metal being removed, resulting in reduced cutting forces and temperatures. These new cutting tools make it possible to increase machining speeds without loss of tool life. In addition, it has been found that the much freer chip flow achieved with these new cutters gives a noticeably better surface finish on the turned metal parts.

REMOTE SENSING FOR AERIAL SURVEY
Teledyne Ryan Aeronautical microwave sensors have been installed in a jet aircraft for use in aerial survey work in Alaska, the Gulf of Mexico, and in agricultural areas of the United States. Included are Teledyne Ryan's Radar Scatterometer and Microwave Radiometer, earlier versions of which continue to be used by NASA's Earth Resources Aircraft Program.

HIGH OUTPUT FLASH CUBES
Hafnium, one of the atomic age metals produced by Teledyne Wah Chang Albany, will soon be used in photographic flash cubes that are expected to give at least 50% more light than existing cubes. The additional brightness of the hafnium cubes will permit quality color pictures to be taken at distances up to 18 feet with simple non-adjustable cameras. Another interesting advantage of the hafnium cube is that the color temperature of the light produced is compatible with daylight color films without the use of a built-in filter.

Shown with the new flash cube is hafnium material resulting from three stages of the 20-stage refining and fabricating process: hafnium sponge, iodide crystalline bar and foil. Teledyne Wah Chang Albany is also the world's major producer of the zirconium foil that is used in conventional flash cubes and in the newer magicubes.

Hafnium and zirconium metals are also used very extensively in the construction of atomic power reactors and chemical industry equipment.

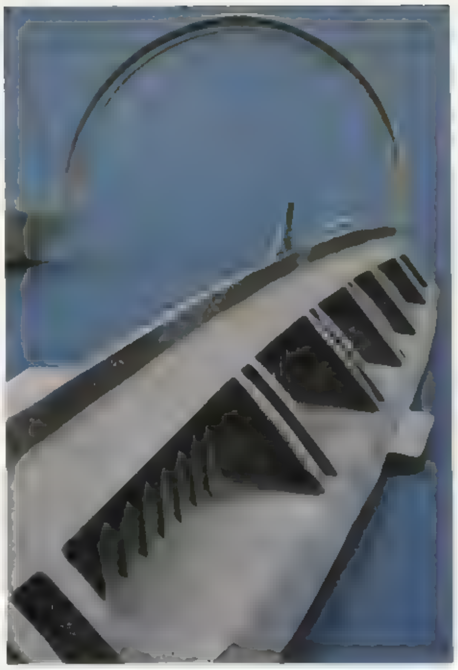


Hafnium flashcube and metal

F-14 CANOPY CASTING

Cost savings of approximately 50% as well as weight savings have been realized with a new precision cast canopy produced by Teledyne Casting for the Navy F-14 aircraft being built by Grumman Aircraft. The 14-foot canopy is believed to be the largest of its kind ever cast as a single monolithic structure. The single casting replaces a fabricated assembly formerly used for this type of structure. The canopy is a precision sand casting of high strength aluminum alloy that has a tensile strength in excess of 50,000 pounds per square inch. Dimensional tolerances are held to ±20 thousandths of an inch, and wall thickness in some parts of the casting are as thin as 100 thousandths of an inch. The total weight of the casting is 86 pounds.

F-14 canopy casting

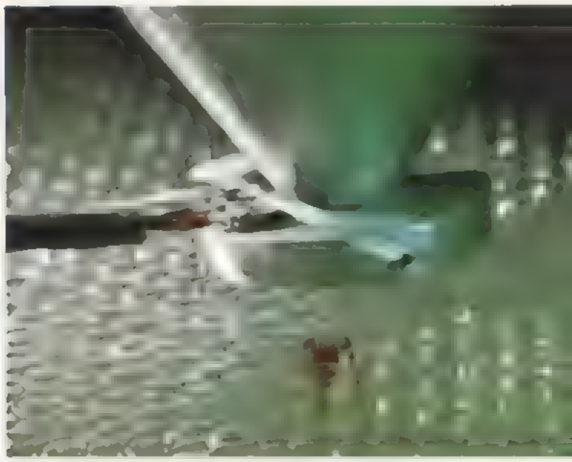


LARGEST PLASTIC INJECTION MOLD

What is believed to be the world's largest one-shot injection mold for the production of thermoplastics has been designed and built by Teledyne Efficient Industries for a major plastics manufacturer. The mold will be used to mass produce lightweight pallets of high density polyethylene which will be widely used by major can companies for shipping their products.

The 80,000 pound mold is constructed of a combination of beryllium copper and tool steel for effective heat transfer. It has 60 gates and 8 hydraulically-operated mechanically-locked sequentially-timed slides, lifter cores and inserts to produce the complex honeycomb design.

Firebee II



Semiconductor tester / sorter

FIREBEE II IN PRODUCTION

Nearly 5000 Firebee aerial target drones have been built by Teledyne Ryan Aeronautical in the last two decades. In 1970 production began on the growth-version Firebee II, a sleek 28-foot remotely controlled jet aircraft capable of supersonic speeds in excess of 1000 miles per hour. Fourteen of the new Firebee II's were developed and test flown under an initial U.S. Navy contract. More than 100 are now on order by the Navy and the U.S. Air Force in two different versions.

On the international scene, arrangements were completed for the fabrication of Teledyne Ryan Aeronautical Firebee target systems in Japan. The Japanese firm of Fuji Heavy Industries will produce drones for exclusive use by Japanese Self Defense Forces under a two-phase production plan.

HIGH OUTPUT TUBE BENDER

A mechanically-programmed hydraulic tube bender that is ideal for the manufacture of tailpipes and other high output shapes formed by bending tubing has been introduced by Teledyne Pines. This rotary bending machine can make from 600 to 900 bends an hour in a progressive series in different planes, locations and angles to form such complex shapes as automobile exhaust systems.

The machine is programmed by setting a series of cams. The operator then loads a length of straight tubing and presses a button and the machine then makes all bends without further attention from the operator. The machines are now being used by several major original equipment and replacement part manufacturers in the automotive industry.

AUTOMATED SEMICONDUCTOR TESTING

Precise matching of semiconductor chips to their specific circuit is a critical factor in assuring reliable operation and high performance of hybrid circuit modules that are used in virtually every electronic application from anti-pollution monitors and automotive fuel injection controls to cardiac monitors and lunar seismology. Teledyne Philbrick Nexus has recently perfected a unique automated testing system which automatically selects more than 500 semiconductor chips per hour matched to 1000 categories of electrical parameters. An air transport system automatically picks up the chip and deposits it through a delivery tube into a vial which corresponds to its selected electrical parameters. Cost savings of 80% or more are achieved with this system.

AR-6 speaker

NEW AR-6 SPEAKER SYSTEM

Acoustic Research has just added a new speaker system to its line of high fidelity equipment. Called the AR-6, it achieves a new level of performance for a system of its size and cost. A measure of the success of the design is its unusually accurate bass response and lack of coloration even when compared with larger and more costly systems.

The most important advance in the AR-6 is the woofer which has optimized parameters of voice coil size and length, magnetic circuit, diaphragm weight and suspension to approach the theoretical limit of performance for an 8-inch acoustic suspension system. The result is a bass speaker with extended response and power-handling ability that occupies no more space than other 8-inch systems.

The high-frequency driver in the AR-6 is a new 1½ inch design that provides outstanding dispersion at very high frequencies.

THERMAL HAZARD DETECTION SYSTEM

A unique thermal hazard detection system for jet engines has been developed under Air Force sponsorship by Teledyne Micronetics. It provides warning when any portion of a long sensing cable reaches a dangerous temperature, permitting corrective action before the outbreak of fire. The system has the unique capability of locating the exact position of the overheated portion of the cable.

In addition to aircraft usage the system can be applied to detecting overheat conditions in any inaccessible areas such as aboard ships or in industrial installations.

FLYING EJECTION SEAT

Pilots of the future may be able to eject from crippled aircraft and fly their ejection seats as controllable powered aircraft to a safe landing area as far as 50 miles from the point of ejection. Teledyne CAE recently provided an experimental turbojet engine for a feasibility demonstration of a prototype flying ejection seat sponsored by the U. S. Air Force Flight Dynamics Laboratory at Wright-Patterson Air Force Base.

Designated AERCAB (Aircrew Escape Rescue Capability) the system consists of a rigid parawing attached to the seat and is powered by a small Teledyne CAE turbojet engine. After ejection the wing deploys and the engine is started.

The feasibility tests were performed with an unmanned instrumented flight test vehicle by ground remote control.

The Teledyne CAE turbojet is designed for quick start capability after extended storage, low maintenance requirement and low-cost short life because of the expendable nature of its mission.

AUTOMATED BAKERY

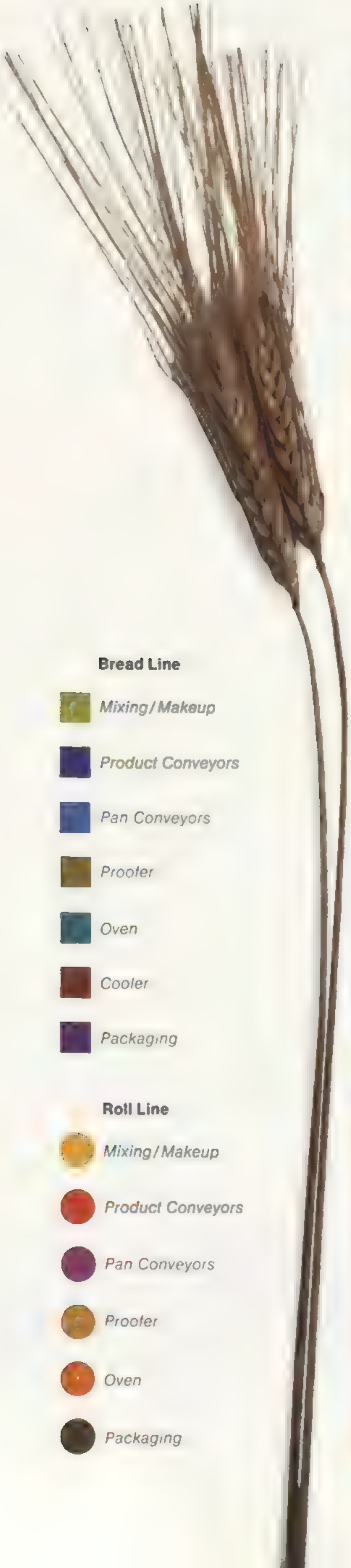
Over 14 billion pounds of bread and bread-type products such as hamburger and hot dog rolls are produced annually in the United States. Add to this all the sweet rolls, cakes, cookies and other specialty baked goods that are produced and you have an $8 billion-a-year industry out of what used to be the independent corner bakeshop.

Baking today is a highly automated business, and Teledyne Readco has been a major factor in producing the equipment that permits the mass production of a wide variety of high-quality baked goods at reasonable cost under the strict sanitary regulations of state and federal governments.

Typical of Teledyne Readco's involvement in the baking industry is the new 120,000 square-foot automated bakery being built in Puerto Rico. Teledyne ovens, proofers, coolers, related conveyors and electronic systems control panels form the nucleus of this plant which will have the highest capacity of any bakery of its type in the world. Its two production lines will be capable of putting out about 13,000 loaves of bread and 43,000 rolls in a single hour.

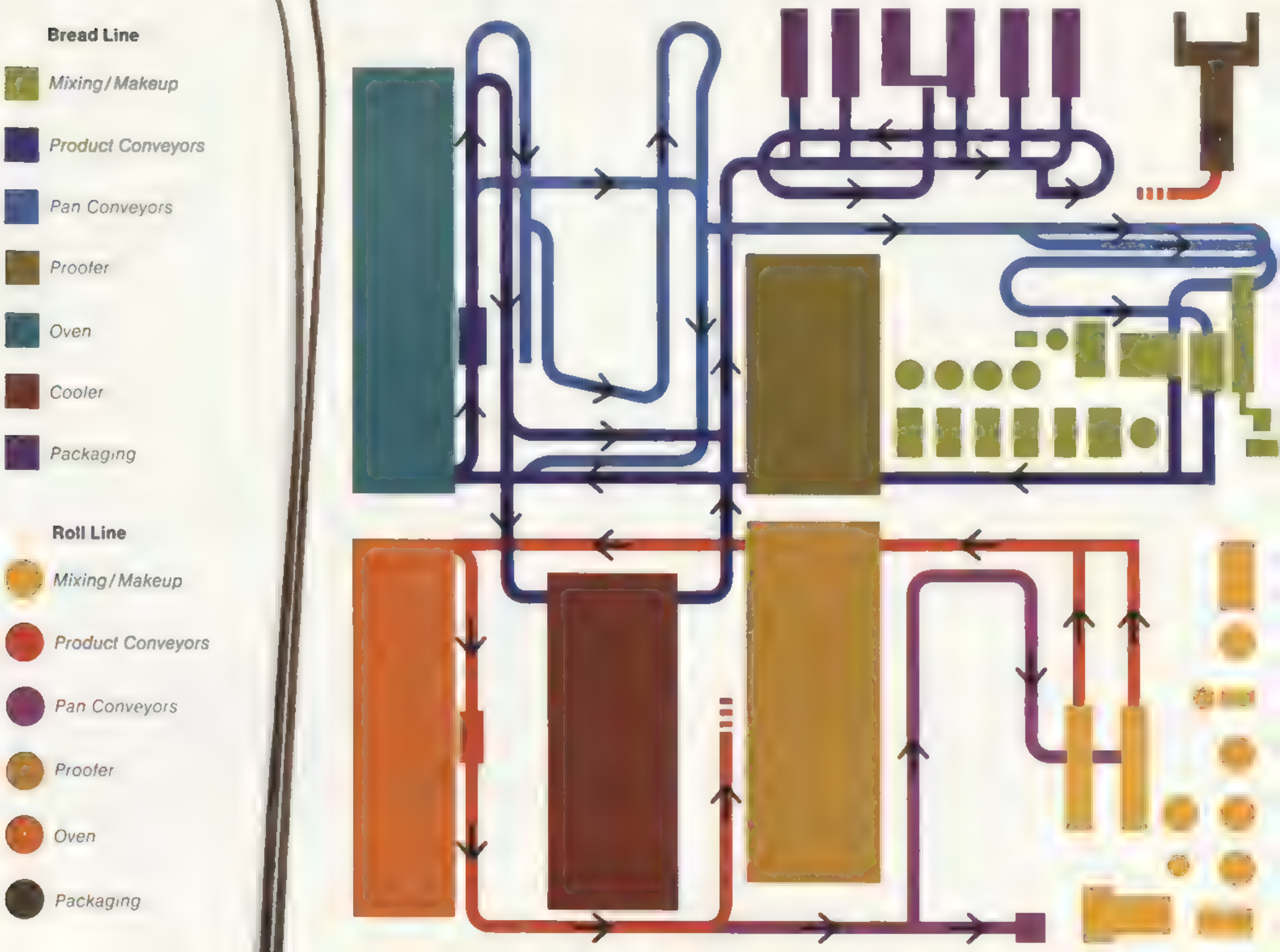
Since the baking industry serves a fast-moving, highly-competitive "daily" market its equipment must offer high reliability as well as flexibility to meet the demands for a variety of forms, textures and types of product. The problems of automating this type of industry are complicated by the fact that dough is a complex, live organism which must be handled gently and with great care.

In basic principle, the process of making bread has changed little throughout the centuries. Essentially, flour, water, yeast, shortening, and salt are mixed continuously or in batches. The resulting dough is put in pans and allowed to raise (proof) under controlled conditions of temperature and humidity before baking. The baked loaves are then depanned, cooled, sliced and packaged for distribution. Teledyne Readco has developed many of the innovations of equipment and systems technology that have automated this industry.



Specialty bread that has been proofed and baked by automated Teledyne Readco equipment is automatically moved to a Teledyne Readco bread cooler, prior to further processing.

Complexity of the bread and roll production area of the automated bakery being built in Puerto Rico is detailed by this flow chart that shows the paths taken by 13,000 loaves of bread and 43,000 rolls produced each hour by Teledyne Readco automated equipment



STEREO HOME ENTERTAINMENT CENTER

An innovative approach to the packaging of a fine home entertainment center is represented by the new Teledyne Packard Bell Mach II Stereo Tower. Especially useful where space is at a premium, the Mach II has built-in speakers which radiate sound through grill cloth on the sides of the base unit.

Stereo electronics include a solid-state two-channel amplifier with 34 watts peak music power, solid-state AM/FM stereo tuner, 4-speed automatic turntable and an 8-track stereo tape cartridge player with pushbutton and automatic sequencing. Optional equipment includes a stereo cassette and reel to reel player/recorder and stereo headset.

Shown in the top space is the Teledyne Packard Bell Explorer III 18″ color television portable. The space will accommodate most 18″ color or 19″ black and white sets, or the shelf may be used for storage and display of books or art objects.

The unit is equipped with casters and may be moved about easily.

Stereo Tower

Water Pik Oral Hygiene Center

TWO NEW WATER PIK® APPLIANCES

Latest model in the Teledyne line of oral hygiene appliances is the sleekly sculptured BJ-70 Oral Hygiene Center that combines the Water Pik oral irrigating appliance with the new Touch-Tronic® cordless rechargeable electric toothbrush. The electric toothbrush is also available separately as the Model ET-10. It provides elliptical cleaning motion — up, down and around—as is professionally recommended. Brush starts automatically when it touches the teeth, or can be controlled manually with a switch. The power unit is automatically recharged, when replaced in its holder, by an induction charging system that has no metal-to-metal contact and can't corrode. The ET-10 comes with a wall mounting bracket and six brushes.

The Water Pik oral irrigating appliance operates with a patented pulsing action that sends 1200 jets of water per minute surging through crevices between the teeth and under the gum to flush out food particles that brushing alone cannot reach.

®Exclusive trademark of Teledyne

AUTOMATED SEMICONDUCTOR HANDLING

Handling of integrated circuit dice measuring up to 2/10ths of an inch has been simplified by the introduction of new equipment and materials developed by Teledyne TAC. Each die is held by adhesive in a separate cavity on a continuous strip of mylar tape, and can be positioned within a tolerance of ±.002″. The tape is also accurately punched with index holes that facilitate the registration and transfer of each die to a substrate by automatic Teledyne-produced equipment. A single reel of the tape, shown below, can hold up to 4000 integrated

circuit dice. This method allows full automation of the manual sorting and assembly processes with substantial labor savings.

SEALANT FOR NEW BUILDINGS

Teledyne Coast Pro-Seal will supply some 5000 gallons of sealant to weatherproof the two 52-story towers of the Atlantic Richfield Plaza project now being erected in Los Angeles. The company's two-component polysulfide sealant, Ultratite 101, will be used to seal the joints between the black granite facing of the building, and between the granite and the window and louvre frames. Teledyne Coast Pro-Seal manufactures over 200 types of specialized sealants and adhesives used in industrial, architectural, marine, electronic and aerospace applications.

Financial Statements

Highlights of Ten Years Operations

Brown figures are restated to reflect subsequent poolings of interests.
Black figures are historical results of Teledyne, Inc., as originally reported.

	1970	1969	1968
Sales	$1,216,448,000	$1,294,775,000	$874,905,000
	1,216,448,000	1,294,775,000	806,747,000
Income before Federal income taxes	109,620,000	114,603,000	85,992,000
	109,620,000	114,603,000	78,220,000
Provision for Federal income taxes	45,500,000	54,500,000	40,400,000
	45,500,000	54,500,000	37,500,000
Net income	64,120,000	60,103,000	45,592,000
	64,120,000	60,103,000	40,720,000
Net income per share of common stock and common stock equivalents	1.91	1.89	1.54
	1.91	1.89	1.51
Working capital	283,678,000	297,706,000	237,773,000
	283,678,000	297,706,000	217,030,000
Total assets	971,067,000	944,237,000	661,225,000
	971,067,000	944,237,000	604,248,000
Shareholders' equity	589,509,000	504,865,000	363,700,000
	589,509,000	504,865,000	317,389,000
Average number of common shares and common share equivalents outstanding	32,496,026	31,227,967	29,476,939
	32,496,026	31,227,967	27,180,634

Net income per share and average number of common shares outstanding assume full conversion of all common stock equivalents, and are adjusted for all stock splits and for all stock dividends, including the 3% stock dividend payable February, 1971.

1967	1966	1965	1964	1963	1962	1961
$777,745,000	$700,211,000	$559,680,000	$465,304,000	$423,216,000	$388,420,000	$297,564,000
451,060,000	256,751,000	86,504,000	38,187,000	31,925,000	10,438,000	4,491,000
63,053,000	57,593,000	49,541,000	37,295,000	29,017,000	21,591,000	9,578,000
40,745,000	22,185,000	6,502,000	2,979,000	1,505,000	344,000	133,000
28,400,000	25,900,000	22,500,000	17,100,000	13,100,000	10,300,000	3,900,000
19,000,000	10,150,000	3,100,000	1,538,000	774,000	187,000	75,000
34,653,000	31,693,000	27,044,000	20,195,000	15,917,000	11,291,000	5,678,000
21,745,000	12,035,000	3,402,000	1,441,000	731,000	157,000	58,000
1.22	1.16	1.05	0.83	0.66	0.47	0.21
1.05	0.77	0.42	0.28	0.16	0.05	0.02
222,075,000	139,911,000	119,257,000	104,041,000	90,018,000	71,565,000	62,581,000
149,942,000	60,543,000	30,803,000	14,220,000	9,263,000	2,546,000	1,614,000
541,526,000	463,120,000	371,131,000	311,667,000	284,193,000	309,247,000	199,128,000
337,703,000	170,369,000	66,544,000	35,040,000	23,901,000	10,844,000	3,731,000
272,531,000	258,117,000	205,762,000	173,069,000	155,844,000	134,536,000	118,599,000
153,092,000	90,205,000	34,765,000	13,672,000	8,629,000	3,527,000	2,477,000
27,787,117	26,246,373	24,444,675	22,445,994	21,592,571	20,721,822	19,685,139
21,293,445	15,718,062	7,908,056	4,912,647	4,024,294	3,188,569	2,385,826

Teledyne, Inc. and Subsidiaries

Consolidated Balance Sheets

October 31, 1970 and 1969

Assets

	1970	1969
Current Assets:		
Cash	$ 31,432,000	$ 28,250,000
Marketable securities, at cost which approximates market	423,000	1,279,000
Receivables, less reserve	159,007,000	213,343,000
Inventories, at the lower of cost (principally first-in, first-out) or market, less progress billings of $45,953,000 in 1970 and $64,896,000 in 1969	225,952,000	236,022,000
Prepaid expenses	13,830,000	17,419,000
Total current assets	430,644,000	496,313,000
Investment in Teledyne United Corporation (Note 1)	208,534,000	124,295,000
Property and Equipment, at cost:		
Land	19,510,000	19,288,000
Buildings	101,872,000	96,847,000
Equipment and improvements	366,431,000	347,736,000
	487,813,000	463,871,000
Less – Accumulated depreciation and amortization	202,738,000	182,425,000
	285,075,000	281,446,000
Other Assets:		
Cost in excess of net assets of purchased businesses	33,681,000	23,861,000
Other	13,133,000	18,322,000
	46,814,000	42,183,000
	$971,067,000	$944,237,000

The accompanying notes are an integral part of these balance sheets.

Liabilities

	1970	1969
Current Liabilities:		
Notes payable	$ —	$ 26,272,000
Current portion of long-term debt and subordinated debentures	13,496,000	4,537,000
Accounts payable	51,875,000	66,243,000
Accrued liabilities	75,895,000	76,555,000
Federal income taxes	5,700,000	25,000,000
Total current liabilities	146,966,000	198,607,000
Long-Term Liabilities:		
Long-term debt (Note 3)	103,643,000	107,661,000
Deferred Federal income taxes (Note 9)	22,714,000	13,664,000
Accrued pension benefits (Note 8)	6,298,000	7,374,000
Subordinated Debentures (Note 3)	97,247,000	98,494,000
Minority Interest	4,690,000	13,572,000
Shareholders' Equity:		
Preferred stock (liquidation preference $69,546,000 in 1970 and $86,067,000 in 1969, Note 5)	1,259,000	1,542,000
Common stock (Notes 3, 4, 5 and 10)	28,390,000	24,942,000
Additional paid-in capital	388,652,000	337,017,000
Retained earnings (Notes 3 and 5)	171,208,000	141,364,000
Total shareholders' equity	589,509,000	504,865,000
	$971,067,000	$944,237,000

Consolidated Statements of Income

For the Years Ended October 31, 1970 and 1969

	1970	1969
Sales	$1,216,448,000	$1,294,775,000
Equity in Net Income of Unconsolidated Subsidiary (Note 1)	15,140,000	10,521,000
	1,231,588,000	1,305,296,000
Costs and Expenses:		
Cost of sales	949,084,000	1,007,542,000
Selling and administrative expenses	163,909,000	171,015,000
Interest expense	8,975,000	12,136,000
	1,121,968,000	1,190,693,000
Income Before Federal Income Taxes	109,620,000	114,603,000
Provision for Federal Income Taxes (Note 9)	45,500,000	54,500,000
Net Income	$ 64,120,000	$ 60,103,000
Net Income Per Share of Common Stock and Common Stock Equivalents (equal to net income assuming full dilution — Note 2)	$1.97	$1.94
Net Income Per Share of Common Stock and Common Stock Equivalents Adjusted for 3% Stock Dividend Payable February, 1971	$1.91	$1.89

Costs and expenses include provisions of $31,840,000 in 1970, and $29,616,000 in 1969 for depreciation and amortization (principally on a straight-line basis) of property and equipment.

Consolidated Statements of Retained Earnings

For the Years Ended October 31, 1970 and 1969

	1970	1969
Balance, Beginning of Year	$141,364,000	$127,293,000
Add or (Deduct):		
Net income	64,120,000	60,103,000
Fair value of common stock dividends (Note 5)	(28,496,000)	(34,721,000)
Difference between cost and book value of common stock acquired by a subsidiary	—	(5,321,000)
Cash dividends paid or accrued on preferred stock	(5,780,000)	(5,181,000)
Dividends paid by pooled businesses prior to pooling	—	(809,000)
Balance, End of Year	$171,208,000	$141,364,000

The accompanying notes are an integral part of these statements.

Consolidated Statements of Capital Stock and Additional Paid-In Capital

For the Years Ended October 31, 1970 and 1969

	Preferred Stock ($1 Par Value)	*Common Stock ($1 Par Value)*	*Additional Paid-In Capital*
Balance, October 31, 1968	$1,119,000	$11,687,000	$223,601,000
Add or (Deduct):			
Common stock dividend	—	349,000	34,372,000
Purchases of businesses	655,000	25,000	89,530,000
Stock option and purchase plans (Note 4)	5,000	97,000	2,040,000
Two-for-one common stock split and conversions of debentures and preferred stock	(237,000)	12,784,000	(12,526,000)
Balance, October 31, 1969	1,542,000	24,942,000	337,017,000
Add or (Deduct):			
Common stock dividend	—	792,000	27,704,000
Pension and profit sharing contributions	—	1,011,000	13,396,000
Stock option and purchase plans (Note 4)	2,000	236,000	4,052,000
Conversions of debentures and preferred stock	(285,000)	1,409,000	6,483,000
Balance, October 31, 1970	$1,259,000	$28,390,000	$388,652,000

The accompanying notes are an integral part of these statements.

Auditors' Report

To the Shareholders and
Board of Directors, Teledyne, Inc.:

We have examined the consolidated balance sheets of TELEDYNE, INC. (a Delaware corporation) and subsidiaries as of October 31, 1970 and 1969, and the related statements of income, capital stock and additional paid-in capital, and retained earnings for the years then ended. We have also examined the consolidated balance sheets of Teledyne United Corporation and subsidiaries as of October 31, 1970 and 1969, and the related statements of income and equity for the years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine the consolidated financial statements of Unicoa Corporation and subsidiaries which are summarized in Note 6 to the financial statements; however, we were furnished with the reports of other auditors thereon.

In our opinion, based upon our examinations and the reports of other auditors referred to above, the accompanying consolidated financial statements present fairly the consolidated financial position of Teledyne, Inc. and subsidiaries and of Teledyne United Corporation and subsidiaries as of October 31, 1970 and 1969, and the results of their operations for the years then ended, all in conformity with generally accepted accounting principles consistently applied during the periods.

ARTHUR ANDERSEN & CO.

Los Angeles, California,
December 2, 1970.

Teledyne United Corporation and Subsidiaries

Consolidated Balance Sheets

October 31, 1970 and 1969

	1970	1969
Assets:		
Cash	$ 1,540,000	$ 564,000
Time deposits	—	12,350,000
Marketable securities, at cost which approximates market	8,004,000	7,535,000
Installment loans receivable, less reserve	64,713,000	58,311,000
Investments in unconsolidated subsidiaries (Note 1):		
Unicoa Corporation (Note 6)	160,845,000	150,933,000
Property and casualty insurance subsidiaries (Note 7)	110,835,000	114,882,000
Cost in excess of net assets of purchased business	4,894,000	4,894,000
Other assets	6,331,000	7,556,000
	$357,162,000	$357,025,000
Liabilities:		
Notes payable to banks	$ —	$ 90,000,000
Investment certificates	55,352,000	50,909,000
Accounts payable, accrued taxes and other liabilities	4,794,000	3,943,000
Long-term debt (Note 3)	41,424,000	41,424,000
Subordinated debentures (Note 3)	37,500,000	37,500,000
Deferred income	9,558,000	8,954,000
Advances from Teledyne, Inc.	78,518,000	9,419,000
Teledyne, Inc. equity:		
Capital stock and additional paid-in capital	88,589,000	88,589,000
Retained earnings	41,427,000	26,287,000
	$357,162,000	$357,025,000

Consolidated Statements of Income

For the Years Ended October 31, 1970 and 1969

	1970	1969
Income:		
Equity in net income of insurance subsidiaries (Notes 6 and 7)	$ 19,234,000	$ 14,466,000
Interest earned and other income	13,397,000	11,379,000
	32,631,000	25,845,000
Expenses:		
Operating expenses	9,153,000	8,185,000
Interest expense, less income tax benefits of $7,227,000 in 1970 and $7,178,000 in 1969	6,814,000	5,933,000
Provision for Federal income taxes of consolidated subsidiaries	1,524,000	1,206,000
Net Income	$ 15,140,000	$ 10,521,000

Consolidated Statements of Equity

For the Years Ended October 31, 1970 and 1969

	Capital Stock and Additional Paid-In Capital	*Retained Earnings*
Balance, October 31, 1968	$ 14,261,000	$ 16,450,000
Add or (Deduct):		
Net income	—	10,521,000
Cost of business contributed by Teledyne, Inc.	74,328,000	—
Dividends paid by pooled business prior to pooling	—	(684,000)
Balance, October 31, 1969	88,589,000	26,287,000
Add — Net income	—	15,140,000
Balance, October 31, 1970	$ 88,589,000	$ 41,427,000

The accompanying notes are an integral part of these statements.

Notes to Consolidated Financial Statements

October 31, 1970

(1) Principles of consolidation: The consolidated financial statements of Teledyne, Inc. include the accounts of the Company and all of its subsidiaries, except Teledyne United Corporation and its financial subsidiaries. Teledyne's investment in Teledyne United Corporation and Teledyne United's investments in its unconsolidated subsidiaries, including net intercompany advances, are carried at cost plus equity in net income. The consolidated financial statements of Teledyne United Corporation and subsidiaries included herein do not include the accounts of its life insurance and property and casualty insurance subsidiaries, the condensed financial statements of which are set forth in Notes 6 and 7. The 1969 financial statements of Teledyne, Inc. and Teledyne United Corporation, and the combined financial statements of the property and casualty insurance subsidiaries shown in Note 7, include the results of operations of pooled businesses for the entire year. The results of operations of purchased businesses are included since dates of acquisition.

(2) Net income per share of common stock and common stock equivalents: The computation of net income per share is based on the average number of common shares outstanding during each year, including common stock equivalents ($3.50 and Series B preferred stock, 5½%, 4% and 3¼% convertible subordinated debentures, options and warrants, and contingently issuable shares). Each common stock equivalent has been considered outstanding from the beginning of each year or date of issuance, and the related dividend requirement or interest has been eliminated. All convertible securities, options and warrants which result in dilution have been included in the computation of net income per share.

(3) Long-term debt and subordinated debentures:

Teledyne, Inc. long-term debt —

6½% Sinking Fund Debentures due 1992, $1,350,000 payable annually commencing in 1972	$ 30,000,000
7⅞% Sinking Fund Debentures due 1994, $1,400,000 payable annually commencing in 1975	30,000,000
7% Promissory Notes due 1989, $750,000 payable in 1973 and $1,500,000 payable annually commencing in 1974	25,000,000
5¾% Promissory Notes due 1981, $410,000 payable annually	4,180,000
Other (including $6,551,000 secured by land and buildings) due in various installments to 1984	19,459,000
	108,639,000
Less — Current portion	4,996,000
	$103,643,000

Teledyne, Inc. subordinated debentures —

3¼%, due 1992, $3,000,000 payable annually commencing in 1978, convertible into common stock at $55.59 per share	$ 59,822,000
7%, due 1999, $1,871,000 payable annually commencing in 1989	37,425,000
4%, due 1971, convertible into common stock at $70.47 per share	8,500,000
	105,747,000
Less — Current portion	8,500,000
	$ 97,247,000

Under the various borrowing agreements, the Company has agreed to maintain minimum amounts of working capital and net worth, and has agreed to certain restrictions with respect to borrowings, purchase and sale of assets and capital stock and payment of dividends. At October 31, 1970, these agreements were complied with and retained earnings of $162,651,000 were not restricted as to payment of dividends.

The Company has reserved 1,197,000 shares of common stock for issuance upon conversion of the subordinated debentures.

Teledyne United Corporation long-term debt —

Notes and loans payable to banks —	
7% to 7½%, due 1975 and 1976	$12,350,000
6⅝% to 6¾%, due 1973 and 1974	11,640,000
7¾%, due in annual installments from 1971 to 1974	4,934,000
	28,924,000
7% notes due 1973	12,500,000
	$41,424,000

Teledyne United Corporation subordinated debentures —

6½% due in annual installments from 1979 to 1983	$37,500,000

The long-term debt and related interest of Teledyne United Corporation and subsidiaries is guaranteed by Teledyne, Inc. and the subordinated debt and related interest of Teledyne United is guaranteed on a subordinated basis by Teledyne, Inc.

(4) Stock options and warrants: At October 31, 1970, 401,807 common shares (of which options for 117,387 shares were exercisable) were reserved for issuance under outstanding options at prices from $7 to $58 per share and 571,737 common shares were reserved for the granting of additional options. At October 31, 1969, 454,473 common shares were reserved for issuance under outstanding options and 628,698 common shares were reserved for the granting of additional options. During 1970, options to purchase 261,560 common shares were granted; options to purchase 108,859 shares were exercised; and options covering 205,367 shares expired or were canceled.

At October 31, 1970, 16,202 shares of common stock were reserved for issuance under warrants assumed in connection with the acquisition of businesses. In addition, 362,025 shares of common stock were reserved for issuance under warrants, each of which provides for the purchase of 9.65 shares of the Company's common stock at $51.84 per share until October, 1978.

(5) Capital stock: At October 31, 1970 and 1969, the Company's capital stock consisted of the following shares:

		Outstanding	
	Authorized	*1970*	*1969*
Cumulative convertible preferred stock, $1 par value	15,000,000		
$6 series		518,024	519,107
$3.50 series		536,948	808,062
Series B		181,933	192,883
Series C		21,607	21,728
Common stock, $1 par value	60,000,000	28,390,362	24,942,442

The 1969 financial statements and related notes, except for shareholders' equity, have been restated to reflect the 3% stock dividend paid in February, 1970.

The holders of the $6 series preferred stock are entitled to voting rights and cumulative annual dividends at the rate of $6.00 per share. Such stock is redeemable at $100 per share after April 22, 1978, and is convertible at any time into 1.34 shares of common stock. The holders of the $3.50 series preferred stock are entitled to voting rights and cumulative annual dividends at the rate of $3.50 per share. Such stock is redeemable at $100 per share after June 30, 1971, and is convertible at any time into four shares of common stock. The holders of the Series B preferred stock are entitled to voting rights, cumulative annual dividends at the rate of $1.60 per share through June 2, 1971, and $3.20 per share thereafter. Such stock is redeemable at $80 per share and is convertible at any time into 2.262 shares of common stock. The holders of the Series C preferred stock are entitled to voting rights and cumulative annual dividends at the rate of $6.00 per share. Such stock is redeemable at $100 per share after January 25, 1973, and is convertible at any time into a maximum of two shares of common stock. The company has reserved 3,297,000 shares of common stock for conversion of all preferred shares.

At October 31, 1970, 56,400 shares of common stock were reserved for issuance to employees under a stock purchase plan.

(6) Unicoa Corporation and subsidiaries: The following condensed statements summarize the consolidated financial position and operating results of Unicoa Corporation and subsidiaries. Teledyne United Corporation owned 60.4% and 51.7% interests at October 31, 1970 and 1969, respectively.

Consolidated Balance Sheets	*September 30*	
	1970	*1969*
Assets:		
Bonds, at amortized cost	$128,658,000	$121,096,000
Stocks, principally at cost (market: 1970 – $51,000,000)	61,091,000	50,843,000
Mortgage loans	173,486,000	168,777,000
Real estate, at cost, less accumulated depreciation	38,719,000	35,645,000
Loans to policyholders	9,590,000	9,485,000
Cash	2,166,000	2,822,000
Other assets	41,400,000	32,039,000
	$455,110,000	$420,707,000
Liabilities:		
Policy reserves and liabilities	$315,872,000	$293,657,000
Mortgage loan payable	11,378,000	11,837,000
Subordinated debentures	22,600,000	—
Other liabilities	23,164,000	23,199,000
Shareholders' equity:		
Common stock	18,732,000	18,732,000
Additional paid-in capital	1,975,000	1,975,000
Retained earnings	87,017,000	71,324,000
	107,724,000	92,031,000
Treasury stock, at cost	(25,628,000)	(17,000)
Total shareholders' equity	82,096,000	92,014,000
	$455,110,000	$420,707,000

Consolidated Statements of Income and Retained Earnings	*Year Ended September 30*	
	1970	*1969*
Income:		
Premiums and other insurance income	$160,972,000	$158,074,000
Investment income less expenses	17,085,000	17,341,000
Other income	3,327,000	2,177,000
	181,384,000	177,592,000
Expenses:		
Benefits paid or provided	79,639,000	79,271,000
Insurance expenses	80,399,000	79,033,000
Provision for Federal income taxes	5,395,000	4,380,000
	165,433,000	162,684,000
	15,951,000	14,908,000
Gain (loss) on sale of investments	(258,000)	1,141,000
Net income	15,693,000	16,049,000
Retained earnings at beginning of year, as previously reported		57,775,000
Adjustment of prior years' provisions for Federal income taxes recorded in 1970		(2,500,000)
Retained earnings at beginning of year, as adjusted	71,324,000	55,275,000
Retained earnings at end of year	$ 87,017,000	$ 71,324,000

The above statements have been prepared on the basis of generally accepted accounting principles which differ in certain respects from statutory accounting practices for life insurance companies.

At September 30, 1970, approximately $35,000,000 (at current tax rates) would be required for possible Federal income taxes which might become due, in whole or in part, in any future years in which approximately $70,000,000 of the insurance companies' gains from operations since January 1, 1959, presently included in retained earnings, might become includable in taxable income under certain conditions, including distributions in excess of $18,000,000 as dividends.

(7) Property and casualty insurance subsidiaries: The following condensed statements summarize the combined financial position and results of operations of the property and casualty insurance subsidiaries of Teledyne United Corporation.

Combined Balance Sheets	September 30 1970	September 30 1969
Assets:		
Bonds, at amortized cost	$203,334,000	$169,111,000
Stocks, at cost (market: 1970 – $27,000,000)	29,128,000	32,344,000
Agents' balances and uncollected premiums, less reserve	33,957,000	27,118,000
Deferred policy acquisition costs	17,340,000	16,023,000
Other receivables	14,130,000	11,528,000
Property and equipment, at cost, less accumulated depreciation	4,549,000	4,394,000
Cash	10,655,000	7,010,000
Other assets	7,036,000	7,200,000
	$320,129,000	$274,728,000
Liabilities:		
Loss and claim reserves	$135,048,000	$111,032,000
Accrued loss adjustment expenses	20,420,000	16,801,000
Unearned premiums	77,703,000	68,717,000
Other liabilities	23,315,000	22,424,000
Federal income taxes	7,089,000	7,162,000
Notes payable to Teledyne United Corporation	2,000,000	2,000,000
Shareholders' equity	54,554,000	46,592,000
	$320,129,000	$274,728,000

Combined Statements of Income	Year Ended September 30 1970	Year Ended September 30 1969
Income:		
Net premiums earned	$186,524,000	$110,211,000
Investment income less expenses	10,615,000	6,025,000
	197,139,000	116,236,000
Expenses:		
Losses and loss adjustment expenses	141,566,000	75,310,000
Underwriting expenses	51,203,000	34,451,000
Provision for Federal income taxes	(1,450,000)	1,313,000
	191,319,000	111,074,000
	5,820,000	5,162,000
Gain on sale of investments, less applicable Federal income taxes	2,369,000	370,000
Net income	$ 8,189,000	$ 5,532,000
Dividends paid	$ 228,000	$ 736,000

The above statements have been prepared on the basis of generally accepted accounting principles which differ in certain respects from statutory practices prescribed by regulatory authorities.

(8) Commitments and contingent liabilities: Annual rentals under long-term leases expiring between 1973 and 1985 are approximately $3,340,000 through 1975, and $890,000 thereafter.

The Company charges pension expense at amounts equal to normal cost plus interest on unfunded prior service cost, and for certain plans, a portion of prior service costs. Total pension expense for the years ended October 31, 1970 and 1969 was $12,369,000 and $14,479,000, respectively. The Company generally contributes accrued pension costs on a current basis, but for certain plans, it contributes the actuarial value of pension benefits commencing upon the employee's retirement. At October 31, 1970, the actuarially computed value of vested benefits for all plans exceeded the total of the pension funds and balance sheet accruals by approximately $8,000,000.

(9) Federal income taxes: Deferred Federal income taxes result from the deduction for tax purposes of accelerated depreciation and other items. The available investment tax credit is amortized as a reduction of the provision for Federal income taxes over the expected lives of the related assets. Federal income tax provisions for 1970 and 1969 include deferred taxes and investment tax credits totalling approximately $11,000,000 and $6,000,000, respectively.

(10) Subsequent events: In December, 1970, the Board of Directors declared a 3% common stock dividend payable February 19, 1971, to shareholders of record January 4, 1971. The financial statements and related notes have not been adjusted to reflect this dividend.

TELEDYNE, INC.

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New York, New York 10005

Registrars

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124 Fourth Street

Los Angeles, California 90013

First National City Bank

111 Wall Street

New York, New York 10015